

TECHNICAL DATA SHEET

TECHNYL 4EARTH A1E 218 V50 BK H
(Previously TECHNYL 4EARTH A4E 218 V50 BLACK)

Polyamide 66, reinforced with 50% of glass fiber, heat stabilized, for injection moulding, black

General

Feature	Heat-aging stabilized		
Polymer type	PA66 (Polyamide 66)		
Processing technology	Injection molding		
Certification	RoHS	EC 1907/2006 (REACH)	
Applications	Automotive Applications		
Colors available	Black		
Forms	Pellets		

Product identification

ISO 1043 abbreviation	PA66(REC)-GF50
ISO 16396 designation	PA66,GF50(R100),M1H,S14-160

Condition	Standard	Unit	Value
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Physical properties

Molding shrinkage, parallel		ISO 294-4, 2577	%	0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.74

Mechanical properties

dam / cond.*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	16600 / -
Stress at break		ISO 527-1/-2	MPa	242 / -
Strain at break		ISO 527-1/-2	%	2.5 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	90 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	14 / -

*: conditioned according to ISO 1110

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Processing conditions

Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	270 - 280 °C
Middle temperature	280 - 290 °C
Front temperature	280 - 300 °C
Recommended mould temperature	70 - 100 °C

Injection notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

Injection advice

For reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 /1.2379 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.

Disclaimer

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